

## APPENDIX E

No. 2002-01 Rev. 1**LEM Chapter/ Discipline:** Chapter 6 / Mechanical**Section(s):** LEM Sections 201.3, Rev. 1, *Plumbing and Mechanical Codes* and 209, Rev. 1, *Piping and Valves***Petitioner(s):** Darren Meadows, FWO-WFM**Inquiry:** Does the UMC Section 1407.1 metallic statement apply to LANL process piping?**Existing wording:**

LEM Section 6-201.3, *Plumbing and Mechanical Codes*, states "The 1997 IAPMO UMC and UPC with Appendices shall be followed..."

LEM Section 6-209, *Piping and Valves*, requires use of the applicable ANSI/ASME B31 code and recommends following DOE-STD-1132, *Design Considerations*.

The 1997 IAMPO UMC App. B, Ch. 14 Process Piping, Subsection 1407.1 General states:  
"Process piping and tubing shall comply with this subsection and shall be installed in accordance with nationally recognized standards. Piping and tubing systems shall be metallic unless the material being transported is incompatible with such system (sic)."

**Clarification** \_\_\_\_ **Interpretation** **X**

No. Following the appropriate B31 code provides sufficient assurance that the system will perform properly. The UMC 1407.1 statement regarding metallic piping is overly prescriptive and simplistic for LANL, an institution that follows B31 codes for design and material selection -- and that has extensive design review. The UMC statement is better suited for commercial and light industrial construction in a municipality than it is for a federal nuclear laboratory.

Furthermore, it is clarified that those UMC administrative sections addressing permits, plan reviews, and fees are not expected to be followed. If and when systems are created to deal with such matters, the corresponding sections will become mandatory.

The foregoing was the collective opinion of the Mechanical Technical Committee on 2/28/02.

**Technical Committee POC:** Tobin Oruch**Date:** 3/8/02**Distribution (via e-mail):**

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